

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/781,082	02/17/2004	Volker Mauer	ALTRP097/A1089	1825	
51501	7590 05/19/2005		EXAMINER		
BEYER WEAVER & THOMAS, LLP			MAI, LAM T		
ATTN: ALTI P.O. BOX 70	<del>-</del>		ART UNIT	PAPER NUMBER	
OAKLAND, CA 94612-0250			2819		

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		A					
	Application No.	Applicant(s)	_				
	10/781,082	MAUER, VOLKER					
Office Action Summary	Examiner	Art Unit	-				
	LAM T. MAI	2819					
The MAILING DATE of this communication a	ppears on the cover sheet w	vith the correspondence address	_				
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rr - If NO period for reply is specified above, the maximum statutory perions  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a eply within the statutory minimum of th d will apply and will expire SIX (6) MC ute, cause the application to become a	reply be timely filed  irty (30) days will be considered timely.  NTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 17	February 2004.						
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	nis action is non-final.						
3) Since this application is in condition for allow	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	r Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-43</u> is/are pending in the application	Claim(s) 1-43 is/are pending in the application.						
4a) Of the above claim(s) is/are withdo	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>4-41</u> is/are allowed.	☑ Claim(s) <u>4-41</u> is/are allowed.						
6)⊠ Claim(s) <u>1-3, 42-43</u> is/are rejected.	☑ Claim(s) <u>1-3, 42-43</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and	or election requirement.						
Application Papers							
9) The specification is objected to by the Examin	ner.						
10) The drawing(s) filed on is/are: a) a	ccepted or b) objected to	by the Examiner.					
Applicant may not request that any objection to the	ne drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the corre	ection is required if the drawin	g(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the	Examiner. Note the attache	ed Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume	nts have been received. nts have been received in iority documents have bee	Application No					
application from the International Bure		t reactived					
* See the attached detailed Office action for a lis	st of the certified copies no	t received.					
Attachment(s)							
1) Notice of References Cited (PTO-892)		Summary (PTO-413)					
2)		(s)/Mail Date Informal Patent Application (PTO-152)					
Paper No(s)/Mail Date <u>2/17/04</u> . 6) Other:							

Application/Control Number: 10/781,082

Art Unit: 2819

### **DETAILED ACTION**

### Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Wessel et al.

Regarding claim 1, Wessel discloses in figure 4 an amplifier circuit that teaches an module for generate index value (34) of input signal, and a look up table (70) for providing correction factors in response to each of index value and conditioning module (60) for compensating at least in part of the distortion corresponding to the input signal (see col. 6, and 6 and figures 4 and 7).

Regarding claim 2, Wessel discloses in figure 4 an amplifier circuit that teaches a look up table (70) for providing correction factors in response to an index value and conditioning module (60) for compensating at least in part of the

Application/Control Number: 10/781,082

Art Unit: 2819

distortion corresponding to the input signal (see col. 6, and 6 and figures 4 and 7).

Regarding claim 3, Wessel teaches in figure 4 and 7 a module (34) for generating the index value.

Regarding claim 42, Wessel discloses in figure 4 a circuit that teaches a predistorer having an module for generate index value (34) of input signal, and a look up table (70) for providing correction factors in response to each of index value and conditioning module (60) for compensating at least in part of the distortion corresponding to the input signal (see col. 6, and 6 and figures 4 and 7).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wessel et al (USP 6,275,685).

Regarding claim 43, Wessel fails to teach a electronic system is from a group consisting of ASIC, PLD, DSP/PLD, and ASIC/DSP. However, it would have been obvious to one of ordinary skill in the art at the time of invention to apply the circuit to any of ASIC, PLD, DSP/PLD and ASIC/DSP system to satisfy the need of the system.

Art Unit: 2819

# Allowable Subject Matter

Claims 4-41 are allowable. The prior art fails to teach or suggest a circuit and a method for a predistorter operable to compensate for distortion introduced by a semiconductor device that implement a feedback module configured to receive a feedback signal from the semiconductor device, the feedback signal being the result of the current input signal having been processed by the semiconductor device and a comparator configured for aligning the current input signal and the feedback signal in determined a differential value.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM T. MAI whose telephone number is (571)272-1807. The examiner can normally be reached on 6:00 am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/781,082

Art Unit: 2819

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pairdirect.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

Page 5

free).

Art Unit 2819